

DEPARTMENT OF THE ARMY

HEADQUARTERS, U.S. ARMY MATERIEL COMMAND 5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333 - 0001

REPLY TO ATTENTION OF

AMCLG (AR 750-1)

1 8 SEP 2000

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: National Maintenance Program Implementation Guidance

- 1. Reference DA message, DALO-ZA, 140623Z Jul 99, subject: The National Maintenance Program.
- 2. Per reference, USAMC was assigned responsibility for the National Maintenance Program (NMP). AMC compiled costs required to implement the program and subsequently received direction from DA to conduct a cost benefit analysis which is well underway and expected to be completed in December 00.
- 3. The purpose of this memorandum is to provide information to you concerning our strategy for implementation and transmit additional guidance for your use to implement that strategy.
- 4. The primary purpose of the NMP is to enhance Army readiness. As such, the NMP serves as an enabler for several programs, one of which is the Recapitalization (RECAP) program. The Army faces a synchronization challenge to ensure the resources available to support development of new standards are applied IAW the RECAP program. As such, our intention is to focus the effort to develop new overhaul standards on those components associated with the 21 RECAP systems. More specifically, NMP components repaired to the National Maintenance Repair Standard (NMRS), may be required to support a given RECAP line or once the RECAP system is fielded the overhauled component will be required to sustain the system in a RECAP status.
- 5. The terminology related to both the NMP and the RECAP program is evolving. I am attaching a glossary of terms (Encl. 1) to serve as a basis for future communications concerning these important programs.

AMCLG (AR750-1)

SUBJECT: National Maintenance Program Implementation Guidance

- 6. The National Program Office initially focused on the components that were center of excellence (COE) items in FY99 as a phased approach to developing new repair standards. As noted above, the focus is now on components to support the recapitalized end items. Via separate correspondence, I will provide you a list of components by weapon system that AMSAA compiled as a starting point for your effort to update an existing Depot Maintenance Work Requirement (DMWR) or develop a National Maintenance Work Requirement (NMWR).
- Once your technical analysis is completed and the components meriting development of an overhaul standard are selected, the next step is to develop the maintenance serviceability standard (DMWR or NMWR) for each item selected. The DMWR or NMWR provides the source of repair the repair procedures that must be accomplished to constitute overhaul to an expected life. including a NMWR Task Guide (ENCL 2) for your use in implementing this aspect of the NMP strategy. Because you have shared information concerning your efforts to date to develop new overhaul standards, we have already captured some lessons learned. The inclination is to include more in the DMWR or NMWR than is required to document the repair process. However, the intent of the component analysis is to enhance the repair not redesign the component. In addition, language pertinent to quality requirements that contractors must adhere to rightfully belongs in the contract not the DMWR or NMWR. As DMWRs and NMWRs are developed and you encounter a need for component redesign or other technical manual changes, those opportunities should be pursued IAW the programs in place such as: Engineering Change Proposals, Product Improvement Proposals, Modification Work Orders, and use of DA Form 2028 (Recommended Changes to Publications and Blank Forms).
- 8. Overall resource requirements to implement the NMP are addressed through the cost benefit analysis. The effort required to develop the overhaul procedures (DMWR or NMWR) will be funded using Sustainment Systems Technical Support (SSTS) resources based upon availability of funding. The DA DCSLOG NMP point of contact is pursuing unfinanced requirements (UFRs) in FY00 and 01 to accelerate development of new standards of repair in order to support the systems in the FY02 RECAP program. To the extent the

AMCLG (AR750-1)

SUBJECT: National Maintenance Program Implementation Guidance

UFRs are funded, we in AMC must be prepared to apply the resources in line with the RECAP system priorities.

- 9. Point of contact at AMC is Mr. Clyde Cargill, DSN 767-2035.
- 10. AMC -- Your Readiness Command . . . Serving Soldiers Proudly!

2 Encls

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NATIONAL MAINTENANCE PROGRAM GLOSSARY

Compliance

Compliance refers to that aspect of quality assurance related to the ISO 9002 Quality System standard. A National source of repair is compliant once NPO determines it has achieved a measurable quality system as a result of a successful external audit. Thereafter, compliance status is contingent on annual internal audits, surveillance audits, and tri-annual external audits.

Depot Maintenance Work Requirements (DMWR)

An existing maintenance serviceability standard for depot level reparables. It prescribes the scope of work to be performed on an item by organic depot maintenance facilities or contractors, types and kinds of materiel to be used, and quality of workmanship. The DMWR also addresses repair method; procedures and techniques; modification requirements; fits and tolerances; equipment performance parameters to be achieved; quality assurance discipline; and, other essential factors to ensure that an acceptable and cost effective product is obtained.

Modernization

Modernization is defined as the development and/or procurement of new systems with improved warfighting capabilities.

National Maintenance Manager (NMM)

Headquarters USAMC is the national maintenance manager.

National Maintenance Program (NMP)

The national maintenance program is a centrally coordinated and controlled repair-based program that is managed by the national maintenance manager. The NMP encompasses the repair of depot and selected field level reparables. The NMP consists of two categories of maintenance management: Field and National. The field category of maintenance management consists primarily of organizational, DS and GS MTOE units where the focus is near-term readiness and components repaired are returned to the user. The national category of maintenance management consists of depot, below-depot, and contractors where the focus is sustainment readiness and components repaired are repaired to the overhaul standard and returned to stock. The purpose of the NMP is to enhance Army readiness and support the Recapitalization program.

National Maintenance Repair Standard (NMRS)

The national maintenance repair standard is overhaul.

National Maintenance Work Requirements (NMWR)

A maintenance serviceability standard for depot level reparables that do not have an existing DMWR and field level reparables that are repaired at the GS level and designated for repair and return to stock. It prescribes the scope of work to be performed on an item by organic depot maintenance facilities, certified National providers, or contractors; types and kinds of materiel to be used; and quality of workmanship. The NMWR also addresses repair method, procedures and techniques, modification requirements, fits and tolerances, equipment performance parameters to be achieved, quality assurance discipline, and other essential factors to ensure that an acceptable and cost effective product is obtained.

Overhaul

Overhaul is maintenance that restores equipment or components to a completely serviceable condition with a measurable (expected) life. This process involves inspection and diagnosis according to the Depot Maintenance Work Requirements (DMWR), National Maintenance Work Requirements (NMWR), or similar technical directions that identify all components exhibiting wear and directs the replacement or adjustment of those items in accordance with the applicable technical specifications.

Qualification

Qualification refers to NMP qualification which is a two-part process. The first part requires a potential source of repair to develop, implement, and maintain a measurable quality system in accordance with provisions of the ISO quality standard. This part is referred to as compliance (see Compliance above). The second part is a technical evaluation to validate possession of necessary facilities, tools, TMDE, skills, and manpower required to repair components to the overhaul standard (see Qualified National Provider below).

Qualified National Providers (QNP)

Qualified national providers are sources of repair in compliance with provisions of a measurable quality system possessing the necessary facilities, tools, TMDE, skills, and manpower required to repair components to the overhaul standard. QNP qualification is required prior to facilities initiating repairs to the overhaul standard. QNP qualification is based on an evaluation of a source of repair's compliant quality management system and capability to perform required maintenance to the overhaul standard without additional facilitization.

Rebuild

Rebuild is maintenance that restores equipment to a zero time/zero mile standard. This process involves end item total tear down and replacement of all expendable components, all aged components, reconditioning of structural components, and the procedures identified for overhaul of the end item. In addition, this process restores the item to a standard configuration by installing all outstanding Modification Work Orders/Engineering Change Proposals (MWOs/ECPs) and allows for technology insertion.

Recapitalization

Recapitalization is defined as the rebuild and selected upgrade of currently fielded systems to ensure operational readiness and a zero time, zero mile system.

Selected upgrade

Selected upgrade is the rebuild of a system that adds warfighting capability improvements.

NATIONAL MAINTENANCE WORK REQUIREMENT (NMWR) TASK GUIDE

This NMWR task guide provides general procedures to be applied to reviewing existing Depot Maintenance Work Requirements (DMWR) as well as preparing NMWRs for both depot and field level reparable components. For components with existing DMWRs, those DMWRs will be reviewed and updated to ensure the National Maintenance Repair Standard (NMRS) designated as overhaul produces an expected life and is reflected in the resulting document that will continue to be referred to as a DMWR. For those components where the new overhaul standard is being developed for the first time, the new document is known as a NMWR.

The primary effort supporting the development of an updated DMWR or NMWR is component analysis. The component analysis will provide the technical analytical basis for the creation of the final DMWR/NMWR document and new overhaul standard. In the analysis all failure mode analysis data, depot reports, below-depot work order data, Quality Deficiency Reports (QDR), safety data, and other applicable sources of maintenance and repair information will be analyzed to identify component and part histories. Statistical analyses will be conducted to provide component base lines and data points for predictions. Component parts will be analyzed for finite life, stress, and tolerance predictions. The NMWR will include a mandatory replacement parts list required to achieve the new overhaul standard. Laboratory testing and design analyses and reviews are conducted when required by the technical considerations related to the item being reviewed.

The component analysis will review the sequence of events for the pre-shop analysis, component overhaul, and related business processes. The component analysis has three possible outcomes. First, it supports development of a DMWR/NMWR that describes the repair process required to achieve the NMRS for each selected component that increases the mean time between failure (MTBF) at an affordable cost. Second, it verifies the existing maintenance documentation meets the NMRS and produces an expected life that achieves the best possible MTBF attainable. Third, the analysis reveals the component is not a maintenance candidate and should be redesigned, replaced, or recoded.